

7 February 2003

SPRUSON & FERGUSON
GPO Box 3898
SYDNEY NSW 2001

Your Ref : 580931M:RMM:PJM

Examiner's first report on patent application no. 31686/00
by NOKIA CORPORATION

Last proposed amendment no.

Dear Madam/Sir,

I am replying to the request for examination. I have based this report on the pamphlet and the amendments already made under the Articles of the PCT dated 25 April 2001. I have examined the application and I believe that there are lawful grounds of objection to the application. These grounds of objection are:

1. There is no Notice of Entitlement on file. You will need to file one because an application without a Notice of Entitlement cannot be accepted.
2. The invention defined in claims 1 and 3 does not involve an inventive step when compared to the disclosure of prior art document

WO 9721287 A1 (Advanced Micro Devices, Inc.) 12 June 1997 (12.06.97)
(see page 3, lines 5-9)

The problem addressed by the current application is to provide a radio link system cheaper and simpler than the prior art arrangements, namely, the frequency division duplex and time division duplex arrangements. The frequency division duplex arrangement appears to require filters with quite narrow pass bands, several different versions of radio apparatuses in order to cover the various sub-bands and several parallel transceiver units which can be quite expensive. The time division duplex arrangement requires more complex apparatuses due to the presence of lower data rates, while in some cases, due to the division of the central station into separate sectors, the transmission and reception periods of the different sectors have to be synchronised or the frequencies have to be chosen so that they are sufficiently apart, so that a transmission of an adjacent sector will not disturb the reception of another sector at the central station.

The person skilled in the art (PSA) in this instance would clearly be an individual with expertise in the design and engineering of communication systems and in particular radio link systems. Furthermore they should not only have a knowledge of these systems, but a sound understanding of the electronic hardware implemented in each of the stations situated in the system, in order to determine which data transmission method will require the least complex and expensive hardware.

The cited art is directed to a problem similar to the applicant's problem, and in searching the problem a person skilled as identified above could reasonably be expected to have found, and to have ascertained, understood, and regarded, this prior art as relevant.

The cited art discloses a method of radio frequency communications between a first unit and a second unit. The method comprises the steps of transmitting during a first interval, over a first frequency, by the first unit, receiving during the first time interval, over the first frequency, by the second unit, transmitting during a second time interval, over a second frequency, by the second unit, and receiving during the second time interval, over the second frequency, by the first unit. Furthermore the first and second unit operate in TDD mode.

Therefore it would be obvious for a PSA to routinely arrive at a solution which utilizes a time division multiplex signal in transmission from the central or base station and hence form a time division multiple access signal to be transmitted from the substation(s). Thus as this solution is the same as the claimed solution, the nominated claims hence lack an inventive step.

3. The invention defined in claims 2 and 4-9 does not involve an inventive step, due to the claimed arrangement providing an obvious solution to the described problem. In relation to claims 2 and 4 it must be obvious for a person skilled in the art to implement a method and system where the central station controls the time periods used for transmission and reception by the substations. Furthermore it would also be obvious for a person skilled in the art to implement the system in a GSM mobile communication system, a UMTS mobile communication system, a broadband data transmission system, an LMDS system or a HiperAccess system, which are merely different forms of data transmission systems.

Therefore, the PSA would directly and without difficulty, by routine steps, arrive at a solution which is the same as the claimed solution, and therefore the claims lack an inventive step.

You have 21 months from the date of this report to overcome all my objection(s) otherwise your application will lapse. You will need to pay a monthly fee for any response you file after 12 months from the date of this report.

Yours faithfully,



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